

AMERICAN ARTISAN and Hardware Record

VOL. 85. No. 9.

620 SOUTH MICHIGAN AVENUE, CHICAGO, MARCH 3, 1923.

\$2.00 Per Year.

SHOWING

"Handy" Construction

FEATURES



Patented Aug. 11, 1908

WHEN you snap together two sections of HANDY double-walled furnace pipe, they are together to STAY—until they are PULLED apart.

The long-tongued joint is so compressed as to LOCK the two sections together.

The satisfaction it has never failed to give is its own best recommendation.

*It is "Handy" by name
It is "Handy" to work with
It is "Handy" to get*

*Jobbers Everywhere
Write for Catalogue*

"HANDY" IS THE ORIGINAL SELF-LOCKING PIPE!

The Weir Steel Furnace

GAS AND SOOT CONSUMING

THE Weir is the Father of Steel Furnaces—over a third of a century the name Weir has meant unbeatable quality in furnaces.

There is one of only two reasons why you don't sell the Weir—

One reason is that the agency in your section is taken—the other that as yet you haven't realized that Weir quality, construction, design and fuel economy mean greater satisfaction for your customers and yourself—as well as steady and worth while profits.

If you'll match your time against ours we'll be only too glad to prove that outside of the first reason you should have NO reason for not selling the Weir.

Or Ask for Catalog and Complete Details.

The **MEYER FURNACE CO.**
PEORIA, ILLINOIS



Founded 1880 by Daniel Stern

Thoroughly Covers
the Hardware, Stove,
Sheet Metal, and
Warm Air Heating and
Ventilating Interests

AMERICAN ARTISAN and Hardware Record

Address all communications
and remittances to
AMERICAN ARTISAN
AND
HARDWARE RECORD
620 South Michigan Avenue
CHICAGO, ILLINOIS

PUBLISHED EVERY SATURDAY BY THE ESTATE OF DANIEL STERN

Eastern Representatives: C. C. Blodgett and W. C. White, 1478 Broadway, New York City

Yearly Subscription Price: United States \$2.00; Canada \$3.00; Foreign \$4.00

Entered as Second-Class Matter June 25, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879

Copyright, 1923, by the Estate of Daniel Stern

VOL. 85. No. 9.

CHICAGO, MARCH 3, 1923.

\$2.00 Per Year.

YOU MUST APPRECIATE DIGNITY OF YOUR WORK BEFORE CUSTOMER WILL PAY YOU PROPERLY.

In two of the addresses delivered before the annual convention of the Michigan Sheet Metal and Roofing Contractors' Association, held this week in Bay City, emphasis was laid on the fact that the sheet metal contractor, the roofer, the furnace installer—each one to a more or less extent, but as a class to a great extent—fails to thoroughly appreciate the importance and the dignity of the service which he renders to the person or the public for whom he does a certain piece of work.

The natural consequence of this failure on the contractor's part to realize the dignity of his position and of the service he renders is that the public regards him in a light which, to say the least, is far from flattering.

We are not talking about individual cases, remember, please, for there are men in this business who look upon their profession as one of prime importance and because of this very fact are fast mounting to their proper places in the public's regard, if they have not already reached there.

But as a class, the sheet metal contractor does not look upon his services as those of a professional man, but rather in the light of that of a mechanic, and not even a very high class one—and the public takes a hint from him, putting him in his proper classification, according to his own estimate of himself and his services.

As pointed out by one of the speakers, the public is quite willing to pay well for services

well rendered, as witness the dentist who receives a dollar for pulling a tooth, a job of less than five minutes at the most; as witness the doctor who thumps you on your chest, takes your blood pressure, counts your pulse, looks at your tongue, writes a prescription and charges you five dollars; as witness the lawyer who tells you after listening to you for fifteen minutes that "the other fellow" is wrong and charges you ten dollars for the interview; as witness many others too numerous to mention.

None of these "professional" men spent longer than the sheet metal contractor in training themselves for their work, but they realize the dignity of the service they render, and that is why they can charge and obtain the fees they do.

Is it not about time for you, Mr. Sheet Metal Contractor, for you, Mr. Furnace Installer, to stop for a moment and look yourself over?

Then you will come to realize how really important your service is, and that there is a real dignity to your work.

And then your customers will not be so much inclined to haggle about five or ten dollars more or less for the job.

All this presupposes, of course, that the contractor who reads this is really doing good work, using good materials and, therefore, rendering a valuable service.

The man who "skins the job" is entitled only to "skinned" pay—and not even to that.

Random Notes and Sketches.

By Sidney Arnold

T. Reid Mackin, Chicago representative of the International Heater Company, is very sensitive on the subject of form letters. Down at the Terre Haute convention of sheet metal men he told the following story, which may explain his attitude on the matter:

A traveler on a steamship had written a complaint to headquarters about the presence of vermin in his berth. He received back from the administrative head a letter of immense effusiveness.

Never before had such a complaint been lodged against this scrupulously careful line, and the management would have suffered any loss rather than cause annoyance to so distinguished a citizen, etc., etc.

He was very delighted with the abject apology. But as he was throwing away the envelope there fell out a slip of paper which had apparently been enclosed by mistake. On it was a memorandum: "Send this guy the bedbug letter."

* * *

Good Scotch anecdotes are rare, which is why I especially enjoyed the following sent to me by A. J. Ross of the Henry Furnace & Foundry Company.

"Sandy, lad," said MacDougal to his son, "ye're gettin' marrit th' mornn'. Here's a wee moose trap for ye. If there's anything a woman hates more than a moose, 'tis a moose trap. Tak an auld man's advice, Sandy, an' set it every nicht when ye gang to bed. Then put the siller from yer pockets under th' spring."

* * *

There is a barber in Wabash, Indiana, who failed to get in the last word, and the reason is that M. C. Honeywell of the Honeywell Specialties Company of that city "floored" him, effectively and completely. It seems that "M. C." lay outstretched in the barber's chair,

the bootblack at his feet, the manicurist at his hand, the barber at his face and the check book at his command.

"Pardon me, sir," spoke the tonsorial artist, turning on the juice for the electrical massage dingus, "but did you wish that blackhead removed?"

"By all means," answered "M. C.," glancing due south, "just as soon as he's through shining my shoes."

* * *

It's the little things that count after all. Recently I received a letter from S. W. Hetherington, the alert and aggressive advertising manager of the Fox Furnace Company. The thing that impressed me was not the courteously worded text of the communication, but the signature. Instead of the stereotyped signature—"Fox Furnace Company, per S. W. Hetherington," etc., this letter was signed "S. W. Hetherington, for the Company." And the reason I was impressed was not the legal significance, but rather the implication of esprit de corps and loyalty which the signature implied. "For the Company" struck me as a pretty good slogan.

* * *

My friend, George Carr of the Carr Supply Company, is through with Dr. Coue, I am told. The story is that not so long ago George gave a tryout to the calisthenics-by-phonograph method of reducing his somewhat ample girth. He purchased the requisite dozen records, according to the course, and took them home. The last time I saw George I asked him how he was getting along with the exercises. Here's what he said:

"The course is a fraud! Why, do you know that I have had those records played every morning for a month before I get up and I haven't lost an ounce yet."

F. E. Beeth of the Kruse Company knows the Norwegian lumberjack and vouches for the following yarn as being true to life:

The attorney for the defense was questioning the prosecution's star witness, a Norwegian lumberjack.

"You mean to tell me, Ole, that you saw this murder with your own eyes?"

"Yas."

"At half-past nine in the evening?"

"Yas."

"And at the same time, as you admit, you were a quarter of a mile away?" queried the lawyer.

"O, val," replied Ole, stretching his arms and legs and suppressing a yawn, "Ay tank Ay don't gif a dem about dis trial, anyhow."

* * *

Merle Thorpe, Editor of *The Nation's Business*, the official organ of the Chamber of Commerce of the United States, sends me the following poetical effusion by William R. Benet which I believe will appeal to most of my friends who read this department:

The Turnover Tune.

Said the clock to the dealer,
To the dealer and his stock.
"I am ticking off your profits."
To the dealer said the clock,
"Custom, custom every minute!
Luck is in it—luck is in it!
Where's the risk when Trade is
brisk!
Tick-tock! Tick-tock!"

"You're a liar, you're a stealer,"
Said the dealer to the clock.
"Ticking up my carrying charges—
Making mock—making mock!
Fractions up to dollars mounting
Till they leave my profits nil;
Just reversing my accounting!
Stand still—stand still!"

Oh the goods we bought so gaily
And the goods that will not go!
Adding costs forever daily
Till we tear our hair with woe!
Moods and tenses of expenses
On the poor retailer's stock—
And that devilish little revel
"Twixt the profits and the clock!"

Facts of Warm Air Heating and Ventilating.

Reports of Progress in Warm Air Heater Research Work. Ventilating Factories, Theatres and Other Buildings.

*Charles Bartholomew Heads
Engineering Department of
Fox Furnace Company.*

The Fox Furnace Company, manufacturers of Sunbeam furnaces, made a ten-strike, when they secured the services of Charles Bartholomew, until recently manager of the Furnace Department of the Independent Stove Company.

Mr. Bartholomew will have charge of the Engineering Department which is now being organized by the Fox Furnace Company, and his years of research and practical

experience should certainly make him a highly valuable man for the Company and even more so for the installer of Sunbeam furnaces.

Warm Air Registers Advance Approximately Ten Per Cent.

Effective March first, prices on all warm air registers will be higher, the discounts being reduced as follows:

All 40 and 10 lists are now 40 off, while the 70 lists are 65 off. No change has yet been announced on cast iron registers.

and the cold air duct as loosely connected. We can then think of the furnace as a part of the basement instead of a part of the living rooms. It is also easy then to think of the basement as being a loosely connected portion of each of the living rooms, with the furnace as a means of not only distributing the dust, but also of giving it a desire to adhere to the colder things in the rooms.

Now, what is the remedy?

Manifestly, the cure is to permit no air to enter the duct, or casing, or register boots, except at the place provided at cold air face or seat.

Now I want you gentlemen to tell us how we can stop air or dust from entering any of these places.

The accompanying sketch shows us many of the joints that occur in the externals of a heating plant, and at which air, laden with dust, might enter the system.

"A" is the connection at the bottom of a second story stack. Mr. Redding, will you tell us what provision you would make to be certain no (dusty) air leaked into that connection?

Answer: Well, I try to make a good pipe joint where the boot connects to stack and then put asbestos paper on the joints.

Question: Can air leak through false floor into the space around the stack and finally mix with air going into the room?

Answer: In many cases, yes. Well, then, in future let us put asbestos in the cracks in false floor leading to the bottom of stack and shut out every chance to let dust go up around the stack. Unanimously carried.

"K" is a connection at a first floor register box. The same use of asbestos applies to the boot connection. Even if no extra dust gets into the system some air is apt to leak out around the joint between the register and its box, and the wall

Where Does Dust In a Warm Air Heating Plant Come from and What Is Remedy?

*Kansas City Warm Air Study Club Holds Interesting
and Profitable Discussion Led by L. W. Millis.*

*(Continued from February 24
Issue.)*

No amount of argument will convince the average person that in the furnace heated room it is not entirely due to smoke and dust created by the furnace itself. Therefore, the problem of eliminating every source of dust in a furnace heating plant challenges your very best care, judgment and skill.

It is my purpose to call your attention to the various sources of dust in a warm air heating plant, but first I want to be sure that you are thinking of the space inside of casing and inside of the warm air pipes, and also the return duct as being in reality a part of the inside of the rooms themselves. When the registers are open the air can circulate through them as freely as it does from room to room.

If a dust is raised in one room it can communicate to adjoining rooms; in fact, to the entire house. Why not, therefore, think of the inside of the casing as one of the

rooms of the house, but with special facilities for distributing dust to the communicating rooms. If the joints of the furnace are so completely closed that fine ashes, soot and gas fumes cannot pass through from the inside of the heater to the outside of the heater, then there will be no dust added to the air that passes over the surface of the heater. I do not know of any excuse for not making those joints tight. If no dust, or rather no dusty air, can get into the duct or into the casing, then no more dust would come out of the registers than entered the return air face; although its tendency to stick to things would be increased.

You have now thought of the furnace case as a room in the house. Let us now try thinking exactly the opposite. Let us think of the basement as a place where much dust is unavoidable, and in which coal, dust, ashes, and many other forms of dust and refuse are plentiful, and let us think of the furnace casing

being cooler than the air (and dust) it has a tendency to stick to the wall paper and make streaks near the register. If there is a dark streak there Mrs. Housewife is very apt to call us and tell us the furnace smokes. "Madam, that is dust." To which she replies, "Dust"? Do you mean to tell me I don't know smoke when I see it on my own wall? And right at the register? Dust? Ugh!!"

Now, men, that is a common conversation. I am fed up on it. Can't you reduce it?

Mr. Blent: The carpenters and the lathers and plasterers seem to think we put register boxes in so they can abuse them. I never saw many boxes escape damage. We can't help that.

Mr. Staley: You always force us to sell high priced two-piece wall registers. Why so?

Answer: We have for years tried to get the men to take out the face after the register is set and put asbestos paper around joint between register and box to prevent any air whatever from escaping around the edge of register. A two-piece register costs more but it is worth more for exactly that reason. How many of you always do that? Business of deep embarrassment relieved in only a few spots. Evidently a chance for improvement, men.

Mr. White: I have seen Redding tapping the edge of register with screwdriver handle. Why?

Redding: I always tap the edge of register as I screw it up. The sharp edge settles a little bit into the plaster. It won't leak much air then; but it won't stop it all. Asbestos inside is the final answer. It can't be done with a one-piece register.

We want to call attention to the various openings, A, B, C, D and F. These should all be made tight, dust tight, so no dust laden air can enter casing.

Mr. Gudgel, what can you tell us about dust getting in around the base ring at E.

Mr. Gudgel: Well, we always (or nearly always) put cement around outside of the base, we make a rather rich cement and sand mix-

ture, using as *little water as possible*.

It makes a lot better job if cement is also put on inside of the base ring.

Let us examine I and J, especially J. The air duct at J comes up against a rough stone wall. You can paper all around the bulkheads at I but how can you get a perfectly tight joint at J?

Mr. Boswell: I am certain we don't always get it tight at J. Sometimes I take a 2 x 4 and jam it up—sometimes it is tight.

If we have enough cement after fixing base up we work cement into the cracks left around the galvanized iron where it joins the foundation. Sometimes it stays there. Question: Is there any place about a furnace that lets in more dusty air than at J?

Mr. Hartnett: On nearly every repair or overhaul job I find that the joint between the bottom of the shoe in air duct and the casing at G has never been made. I think more dust gets in there than all other places combined. If we have the air duct down I always make that joint tight, and if we don't take the duct down I push cement in under the shoe to close up the crack there; sometimes I have built up cement around shoe down to floor.

Mr. Morris: On overhaul work old shoes sometimes have a swinging door at M. I never saw one tight enough to stop air (and dust) from going into shoe. I always fasten them and strip with asbestos.

Mr. Coleman: The least bit of dust in the world won't dirty a house if it doesn't get into it. Paper every little bit of a crack and paper or cement every big crack. That is my motto from now on.

Mr. Richardson: I heard Mr. Clark and Mr. Millis saying something about floculated dust. What kind of dust is that? (Laughter.)

Mr. Millis: Fumes arising from manufacturing processes are classified as dust.

In order to save such fumes or dust they cause it to "gather" or "floculate" so that it can be marketed.

I think we might say that common dust "floculates" when it gets to a high cool spot in a room (parlors preferred). A particle of warm dust sticks to a cool surface, then another particle sticks to that piece of dust and another, and another until "dust ropes" several feet long may persist in a dark corner, or they form back of pictures. No, they are not cobwebs or spider webs with dust adhering. I think we can call it *floculated* house dust.

Go after it. Cut down its opportunity. Floculated dust is the high-brow name and dust ropes or cobwebs is the rough nickname for the same thing.

At our next meeting the subject will pertain to chimneys, and we will have a lot of illustrations.

Mr. Simpson, will you please pass those cigars, cigarettes and chewing gum?

Thank you for coming out in such bad weather.

Good night!

Profit and Satisfaction to Customers Are Most Important Factors in Building Successful Business.

That in order to be a successful merchant you must sell your goods at a profit and still satisfy your customers.

That it is equally essential to get the profit and to satisfy the purchaser.

That if you satisfy the customer but fail to get the profit you will soon be out of business.

That if you get the profit, but fail to satisfy the customer, you will soon be out of customers?

That the secret of doing both lies in the word service.

That service does not mean doing something for nothing.

That it does mean doing something so valuable for the customer that he is glad to pay your price for the merchandise in order to have you do it.

Don't send a customer to any part of the store for goods called for unless you are sure they will be found in the place as directed.

Doc Weatherly, the "Real Furnace Man," of Grand Rapids, Points Way to Get Business.

Makes Good Use of Printer's Ink to Induce House Owners to Have Their Furnaces Properly Cared for.

UPON several occasions articles have been published by AMERICAN ARTISAN about C. S. Weatherly, the "Real Furnace Man," of Grand Rapids, Michigan, in which some of his unique ways of getting business were described.

In the following we quote from some of the "printed matter" recently prepared by "Doc" Weatherly, much of which can be used as a model by installers in other cities.

Here is a letter to be mailed this month:

A Timely Suggestion to Our Patrons:

Every year we receive in the fall more orders than we can attend to and give good service to you. If we could receive your order for cleaning and repairing your furnace in May, June and July, we could render far better service. It takes time to get some repairs and they do not always come right, due to various reasons. Some furnaces require a lot of repairing and it takes time.

Now in order to give you the best service we are asking you to send in your orders promptly, stating just when you prefer to have it done, and we will hold the order until that time.

Every part of the furnace should be examined and put in order for the winter; it is not a nice job for the owner to be obliged to put in a fire pot in the winter time, because they forgot to attend to it sooner, and some wait until they get back from their vacations before they order it. This is a mistake, as some have found out to their sorrow, because they have found us too busy to give prompt attention. Have your furnace work done before you go away and it will be ready when you get back.

Now as an inducement to have your work done early, we will examine and clean your furnace for

one-half price or \$1.25 for each furnace, providing we receive your order in May or June, the work to be done before July 31. Please sign and mail the enclosed post card. Respectfully yours,

C. S. WEATHERLY.

The following is taken from the "inside" of a post card folder:

How to Buy a Furnace.

Purchase your furnace and have it installed by a dealer in whom you have confidence and heed the advice and suggestions given.

Do not let Price be the chief consideration or you may find that instead of saving money you are wasting it.

Don't expect too much of a furnace when you have a small one, or when you have it installed by some novice; or by some *would-be furnace man*, or when you buy a furnace because it is cheap; if you do, you have fooled nobody but yourself.

MR. CHARLES WEATHERLY, the veteran furnace man of Grand Rapids, started in at his trade fifty years ago. He has been through the school of Experience and knows how to install a furnace right.

He is the "Real Furnace Man," located at 949 Cherry street, S. E. Citizens Phone 67-454.

To Buyers and Renters of Residence Property.

If you have recently purchased or rented a house, it would be advisable to have the heating plant examined—it may require some repairs or cleaning, possibly a new furnace. Perhaps it does not give good results in warming, without large expense in fuel. We will, at your request, examine the condition of the heating and advise you what is best to do. A small charge will be made for this service, and it will pay to have us do it.

Tear off the card and put on one-cent stamp and mail.

C. S. WEATHERLY.

Note the "return" part of the folder just above this paragraph: Mr. C. S. Weatherly.

Please examine the heating plant at No.....street or avenue, and report to me the conditions and advise how to make it better with less fuel expense.

My residence phone.....

My office phone.....

Sign here.....

Envelope Stuffer on Cleaning Work.

And here is an envelope stuffer that "Doc" uses to get jobs of furnace cleaning and repairing. One-half of this stuffer is in the form of a return card, as will be noticed:

All orders received before June 30 for cleaning furnaces will be done for half price or \$1.25 for each furnace.

We have trained furnace men for this work.

What can you expect if you employ novices?

We examine every furnace cleaned.

....., 1923.

The return card reads as follows: Mr. C. S. Weatherly.

I wish you would have our furnace cleaned about....., and if it needs repairing do it at the same time. If the repairs are large, report to me before ordering material.

Res..... Phone.....

☐ If you wish us to call and see about a new furnace, mark X in square.

No greater mistake is made by a retail merchant than to keep on carrying a lot of old junk, under the deluded impression that it will increase in value, when, as a matter of fact, it is continually decreasing. The only thing to do is to set up a dump-counter.

Not less than 80 different types or different makes of the same type of electric furnaces have been used, tried or suggested for melting copper, brass or bronze, aluminum or nickel alloys. Descriptions of these different types of furnaces are contained in Bulletin 202, just issued by the Bureau of Mines.

Practical Helps and Patterns for the Tinsmith.

Aids to the Improvement of Craftsmanship and Business.
News from Various Branches of the Sheet Metal Trade.

MAKING COPPER COIL PIPE.

By O. W. Kothe, Principal, St. Louis Technical Institute, St. Louis, Missouri. Written especially for American Artisan and Hardware Record.

In the manufacture of stills for chemical plants, breweries, etc., coil pipes are a very common fitting.

Small pipes are best bent by filling with rosin. The rosin is heated and one end of the pipe is stopped up and the pipe is filled full of rosin and permitted to cool.

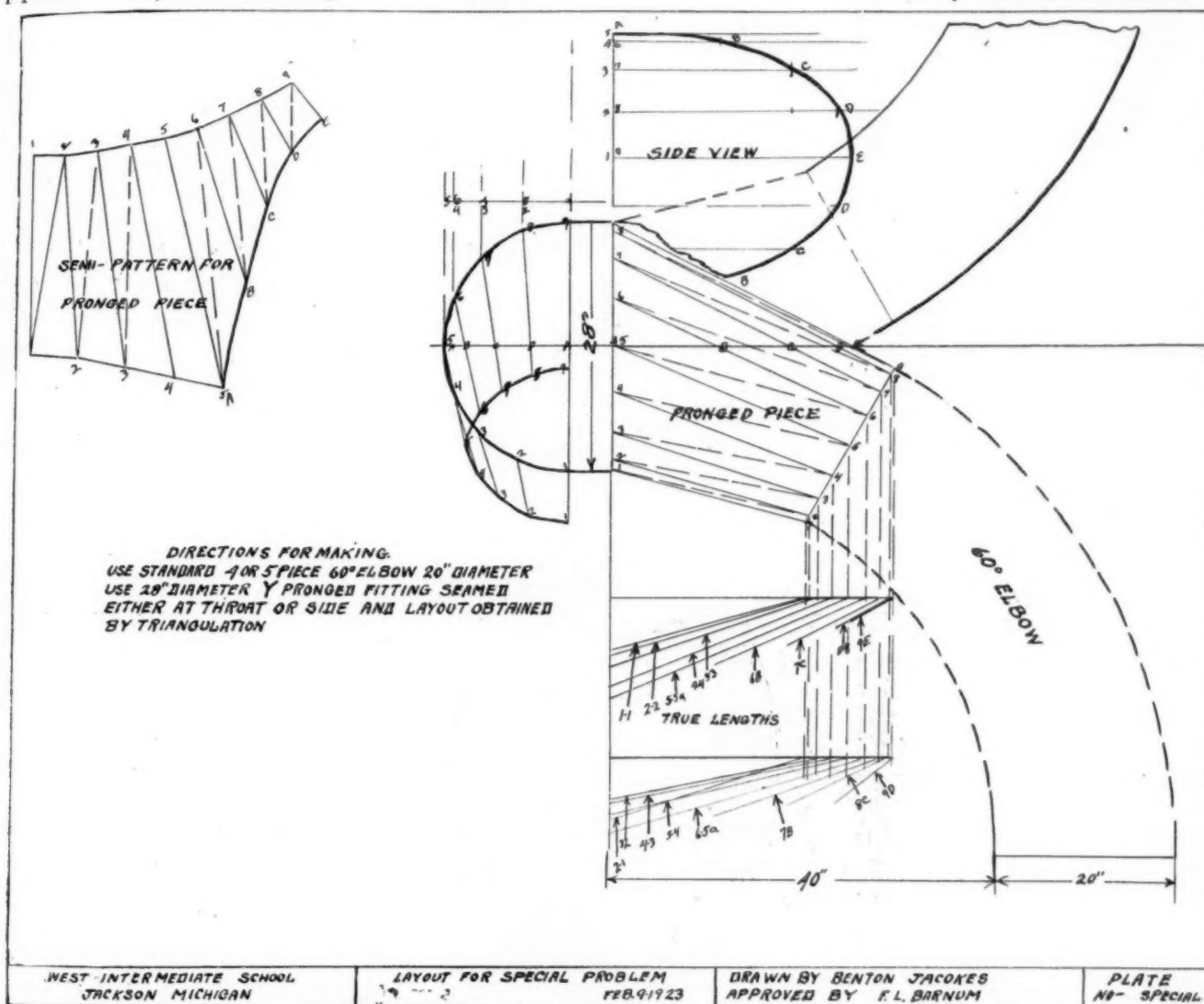
When set the pipe may be bent wherever desired. After being bent, the pipe is heated gradually from the top end, toward the further end and in this way gradually melts out the rosin.

with a mallet as the sand is being filled in.

When filled the top end is corked and the bend can be made similar as at B in figure 10 in an ordinary shop.

Lead jaws are cast of a similar radius to the diameter of pipe as at C and these are set in the vise for holding the pipe secure.

Then by means of the band iron



The bending of copper pipe is very simple when undertaken by the right methods.

Many of the larger shops have regular bending machines, in which most any shape of the curve can be easily produced, so it is round and still holds the pipe uniform.

However, in general practice sand is commonly used as a filler for bending copper tubing.

At A we show a sketch of filling a pipe with sand. The sand should be quite fine, and should be set and compact well in the pipe.

This is done by tapping the pipe

link, or a piece of rope, and a block of wood, with a bar, set in the position shown, the bend is made gradually.

On larger pipes a torch is placed in the position where the bend is to be made as at D.

This helps make the metal more

WEST INTERMEDIATE SCHOOL
JACKSON MICHIGAN

LAYOUT FOR SPECIAL PROBLEM
FEB. 9/1923

DRAWN BY BENTON JACOBES
APPROVED BY F. L. BARNUM

PLATE
NO. SPECIAL

flexible, and by tapping it lightly, as the bend is being made, no trouble will be met with.

The making of coils, as in figure 11, where we have a cylindrical coil as at H, a sort of grooved block as at E and F may be used for making the bends in coil.

In this way as many revolutions are made as are required and afterward the space between the revolutions are averaged up and adjusted so a uniform rise and curvature is maintained.

Where coils are to be made to suit a spiral as at G figure 11, then the spiral is designed from the center either by means of a triangle, or square or hexagon as in this case.

By using the various corners of the hexagon a, the spiral is described making as many revolutions as desired.

After this the copper tubing is bent either with a bending block as at E or in a vise as at figure 10.

As the pipe is being worked, it is occasionally fitted to the working drawing G, so the lines will be followed.

Where a rectangular coil, as in sketch I is met with, then the bends are made to a 90 degree and the pipe is pulled apart, to give it the coil effect.

All this requires practice and when a person once understands give and take in metal, especially copper, all this is very easy.

It is commonly reported, and that by many coppersmiths, the main thing about coppersmithing is hard work, and in that we agree because after the knack of working the metal has been acquired the rest is just labor.

It is, however, a sort of labor that carries skill with it.

Michigan Auxiliary Holds Annual Meeting After Successful Year.

The annual meeting of the Travelers' Auxiliary to the Michigan Sheet Metal and Roofing Contractors' Association was held in Bay City, February 28, the officers' reports showing that the Auxiliary

is progressing and on a good financial basis.

Thomas I. Peacock, the retiring (speaking in a political sense) president, was given a rising vote of thanks, as was Secretary W. W. Chalk, who stepped into the breach when the former Secretary was transferred to another state.

R. W. Blanchard, chairman of the Nominating Committee, presented two complete tickets for the choice of the members, the election resulting as follows:

President—Charles F. Nason, of Milwaukee Corrugating Company, Grand Rapids.

Vice-President—E. B. Root, of Detroit Safety Furnace Pipe Company, Birmingham.

Secretary - Treasurer — W. W.

Chalk, of W. J. Burton Company, Detroit.

Sergeant-at-Arms—A. G. Pedersen, of AMERICAN ARTISAN AND HARDWARE RECORD, Chicago.

Inland Steel Company Will Build Addition to Indiana Harbor Plant Number Two.

Four open hearths and a 14-inch merchant mill are part of the improvements to be made by Inland Steel Company at its Number 2 plant at Indiana Harbor, Indiana. Contracts have been let for 3000 tons of structural steel for the former and 2000 tons for the latter. About 6000 tons more of structural steel will be required for other additions at this plant.

Michigan Sheet Metal and Roofing Contractors Hear Inspiring and Constructive Addresses.

Convention Program Full to Overflowing with Good Things to Hear and Practical Helps.

THE Twelfth Annual Convention of the Michigan Sheet Metal and Roofing Contractors' Association was a big success, especially from the standpoint of the



A. S. Albright, Newly Elected President.

very great opportunity, because they missed the inspiration that came from the numerous instructive and helpful addresses. They may read the report, but after all, the real benefit from a convention is the personal contact and rubbing elbows with your fellow man, accompanied by the exchange of opinions and experiences.

It is, indeed, rare to find in an entire convention program three such addresses as those by Bennett Chapple, Chris Young and N. J. Kennedy, and yet here these three were bunched together in one afternoon, and the audience sat there for more than three solid hours listening, looking, applauding, laughing, almost crying, and would have been willing to stay for more hours if any one of the three had made it necessary.

Mr. Bennett's address on "Sheet Metal Advertising" was a real work of art, because he drew his lessons from actual experience—and what is real art if not the true expression of what the artist has seen and experienced?

It was a fine convention. More contractors should have been there; those who did not attend missed a

Mr. Young, who spoke on "Cost of Doing Business"—a subject which the average man looks upon as a very dry even if a highly important problem of his business—kept the men at close attention for the better part of two hours because of his thorough "at-homeness" with his subject and his audience. They felt that he knew what he was talking about and that he was one of their kind.

Mr. Kennedy brought out in his address on "A Gambler's Chance" the need for appreciation, not only



H. F. Brundage, Director and Secretary Trade Extension Board.

Acting President A. S. Albright by City Manager William Reid with appropriate remarks, after which J. P. Tossell, Bay City, one of the pioneer sheet metal contractors of the state, presented Mr. Albright with two gavels, one black, of medium size, trimmed with silver, suitably engraved, and the other red, big enough to stop any one from



Frank E. Ederle, Secretary.

stances the operation of a fan in connection with a warm air furnace actually resulted in the use of less fuel and in less wear on the furnace, because of the fact that it was no longer necessary to "crowd" the fire.

Harry M. Snow, of The Furnace Fan Corporation, Dowagiac, Michigan, spoke on the subject of "What a Fan Will Do in Completing the Service of the Warm Air Furnace in Heating the Home." His remarks were partly as follows:



William J. Schweitzer, Director and Member Trade Extension Board.

by the contractor but even more so by the public, that his business has a dignity about it which justifies the demand for proper pay for services efficiently rendered.

And then there were the technical addresses during the warm air furnace session Tuesday afternoon, and the installer who attended this session must be better equipped to cope with the problems of his business because of what he heard and saw at that time.

A novelty feature of the entertainment was the singing by the Auxiliary Sextette, consisting of H. E. Doherty, N. L. Pierson, Jr., Joe Stearns, Bill Laffin, D. R. Farquhar and A. G. Pedersen. They sang alone and led the community singing during the sessions.

Tuesday forenoon there was just a short meeting, at which the key of Bay City was turned over to

disturbing the meeting by just tapping him lightly on his head.

Warm Air Furnace Session.

The warm air furnace session was an interesting one.

G. C. Polk, of American Blower Company, read a paper prepared by Vice-President Still of that company, in which the fact was emphasized that furnaces should be sold on the basis of real merit rather than simply on the basis that they cost less than hot water, steam or vapor systems. A warm air heating system, properly installed, is the most efficient, most satisfactory, most healthful and most economical system.

Mr. Polk pointed out that in many instances where furnaces had not given full satisfaction the trouble had been cured by the use of a fan in the cold air duct, and he expressed the opinion that in most in-

Harry Snow's Address.

The warm air furnace has been and is the popular way of heating the average home. It is popular, first, because of its low initial cost and low maintenance cost as compared with steam heat, water or vapor.

It is popular, because it furnishes the home with an abundance of pure, warm, fresh and properly moistened or humidified air. It is the only healthful heat that can be furnished the home. It is popular because of the quick results obtained, a little fire and the chill is taken from the home immediately.

Even though the furnace enjoys this great popularity as a home heating system, still there have been many objections raised to it. But these objections can all be summed up in just one real objection, and that is the impossibility of any fur-

nace installer guaranteeing positive distribution of heat to every room in the house. This no furnace man has been able to do, but when this can be done, all objections will be met, and the warm air furnace will take its rightful place as the best



F. T. Daly, Director and Member Trade Extension Board.

and most ideal way of heating the home.

I am here this afternoon to present to you the answer. To give you the panacea for all warm air furnace problems. The furnace fan, designed and perfected by Mr. Wales, one of the country's ablest thermo-dynamic engineers, positively and uniformly distributes the heat to every room in the house. It has taken years of experimentation and application, and many thousands of dollars to arrive, with a practically fool-proof device, which is operated by the power generated within the heater itself.

The furnace fan consists of a simple six blade disc fan, 25 inches in diameter, a small steam motor, consisting of two little oscillating steam cylinders, 1 7/8 inches in diameter. This motor is connected with a heating element made from a short 12-inch nipple of 3 1/2 inch steel pipe, plugged and welded at

both ends and positioned within the fire pot. In operation the motor not only drives the fan but also a pump, which positively delivers water to the heating element against the steam or vapor existing there. As the steam is exhausted from the cylinders, it is condensed by heating a coil connected with the range boiler and thus heating the water for domestic use, as well as heating the water in the humidifying pot, which is picked up by a current of air drawn over its surface by the fan and driven over the heated surfaces of the furnace to be distributed throughout the house.

The plants operated throughout the past winter have proved that you can pass from 15 to 18 thousand cubic feet of air per minute through the jacket of the furnace, and this means that you can completely recirculate the air of the average home every 10 or 12 minutes. It trebles the capacity of any furnace to which it is attached. It prolongs the life of the furnace, as it is unnecessary to crowd it in order to pass the heat to every room of the house. As there is a slightly greater static pressure around the furnace than that within, there is no leakage of gas, smoke or soot out into the heat chamber to be carried into the home.

There is less heat lost in the basement and more delivered to the different rooms in the house, even though the temperature of the air at the registers is much lower than is found in the average gravity system. It produces a perfect heat diffusion and enables the furnace man to guarantee a perfect heating system.

The furnace fan completes and perfects the service of the warm air furnace in heating the home.

It gives positive distribution of heat.

It gives adequate humidification.

It gives ample hot water for domestic use and it does all this on from 25 to 50 per cent less fuel than it can be done with an ordinary gravity system.

Harry E. Rhodes, Grand Rapids, then took charge of the Question

Box, during which there was a very animated discussion as to how the installment pay plans could be operated to the best advantage for installers and manufacturers at the same time.

Wednesday's Sessions.

Wednesday forenoon's session was an executive one, during which the reports of the officers were rendered.

Acting President Albright did not make a detailed report, but spoke in part as follows:

President Albright's Address.

During the past year the mantle of Elijah has fallen upon Elisha and it is a trifle large. This happened through the resignation of our president, who has entered a new field.

By the members who knew his intelligent and active work in behalf of the Association this is regarded as a distinct loss, and while thanking him for efforts on our behalf, we wish for him all kinds of success in his new undertaking.

Our Association has taken up through its various boards and committees during the past year, some very important matters. Our Trade Extension Board especially



J. D. Candler, Director.

has been quite active in advancing the use of Michigan Standard Products and if assisted by the cooperation of all our members, this movement will have a tendency to greatly improve our standing with the purchasing public.

I cannot too strongly urge more attention to accurate cost accounting. It is the only way to insure uniform and proper prices to customers and legitimate profits to ourselves.

There has been during the past year considerable activity in the apprentice line. Let the good work go on, as the education of young men as sheet metal workers provides remunerative employment for them in a business where compensation depends on merit, insures high class work, and provides against labor shortage on the resumption of big business.

The attitude of the public toward Trade Associations has within a few years, greatly changed. Instead of being regarded as merely price-fixing combinations, they are now considered business organizations beneficial to both the public and their own members. Our own Association has been a prominent factor in this change. I confidently expect that a continuance of our past methods will have a tendency to increase this feeling.

From all surface indications, the prospects for the coming business year are bright and by carefully following our past business methods

corporated. After this contracts were prepared by an attorney licensing mills to manufacture Michigan Standard sheets and products. Contracts were offered to a number of concerns, only one of which accepted.

The efforts of your Secretary were then directed toward the promotion of the sale of these products, with the result that up to January 1, 469 tons were shipped into the state. In addition to this, the rolling mill now has on its books over 200 tons for spring shipment.

Congested mill conditions are going to make it increasingly more difficult to secure sufficient tonnage to satisfy the requirements of our members for this trade-marked material. This especially applies to flat sheets. On eaves trough and conductor pipe you will be fairly well taken care of.

The Trade Extension Board has held five meetings, three in Lansing, one in Detroit and one in Bay City. It is the intention of this board to meet in all the cities where there is a local association. The attendance at these meetings has been remarkable, nearly one hundred per cent. The handling of Michigan Standard has consumed the greater part of the board's attention, although many other subjects have been thoroughly discussed. The members of this board are entitled to great credit for their work.

Several analyses of galvanized sheets have been made, reports of which have been made from time to time. The low quality of material being sold would indicate that this work should continue, especially with a shortage of sheets in sight, which makes it possible for some mills to dispose of most anything regardless of its lasting qualities.

Not much change in the labor is to be noticed, except a growing tendency for higher wages as soon as spring work starts. It is more and more apparent that some concerted action should be taken to increase the number of apprentices in your shops. A considerable amount of work is being done in this direction

by Jackson and Detroit, but it should be more general.

The Board of Directors met four times for the transaction of such business which could not be handled by the Trade Extension Board. Nearly all the members of this



J. A. Shouldice, Treasurer.

board are also members of both boards, which has made it very convenient to hold joint meetings. This arrangement should be continued as far as possible.

No special effort has been made to secure new members, although forty applications were received and accepted.

All local associations have been meeting regularly except Muskegon, Flint and Pontiac. The latter two are now getting back in shape again and hope to do things this coming year. The situation in Muskegon is not very encouraging. Lansing and Albion were recently reorganized and are apparently doing fine.

The summer outing which was held in Chicago and Milwaukee proved to be the most successful event ever staged by the Association. This method of holding the outing should be continued.

My financial report is as follows:

Cash on hand February 17, 1922	\$ 384.69
Money received during the year	8,580.24
	<hr/>
	\$8,965.93



Charles M. Hart, Director.

and improving them where possible, we will be able to realize on their possibilities.

Secretary Ederle's report follows:

Secretary Ederle's Report.

Immediately following our last convention the association was in-

Paid deposit on
in corporation
papers\$ 20.00
Elevated car fare,
etc., in Chi-
cago 45.00
To Treasurer... 8,432.00
————— 8,497.00

Balance on hand.....\$ 468.93

In conclusion, I wish to thank the various committees, board members, the membership at large, the officers and members of the Travelers' Auxiliary, and the trade papers for their loyal support and co-operation given me during the past year. This support and co-operation has made the handling of your affairs a genuine pleasure.

The election resulted as follows:

President—A. S. Albright, Saginaw.

Vice-President—Floyd Harrington, Lansing.

Treasurer—J. H. Shouldice, Battle Creek.

Secretary—F. E. Ederle, Grand Rapids.

Directors for three years—William Sullivan, Detroit; John Meu-



Charles Heth, Director.

lenberg, Kalamazoo, and Clarence Barck, Mt. Clemens.

Lansing is the 1924 Convention city.

The afternoon session was easily the best session the writer has attended for years, and the members and guests showed their apprecia-

tion of the splendid addresses by their close attention.

First was the black board demonstration on "Cost of Doing a Sheet Metal Business," by Chris Young, Secretary-Treasurer of the Howie Company, Detroit.

As has been mentioned before, Mr. Young's talk was one of the best of its kind, but lack of space and time prevents its publication in this issue. It is planned, however, to publish a complete report of his very able presentation of this important subject in our next issue, March 10th.

Bennett Chapple, Publicity Director of the American Rolling Mill Company, Middletown, Ohio, was the next speaker.

Mr. Chapple has the happy faculty of being able to put himself in close accord quickly with his audience and the men listened to his inspiring and helpful address with keen attention. He spoke in part as follows:

Mr. Chapple's Address.

"Advertising is one of the greatest forces in industrial progress today.

"A little better than twenty years ago a sheet metal contracting firm of Verity & Phillips was located in Cincinnati. They knew by experience that gutters and cornices and similar sheet metal products failed to last because of heavy corrosion, or rust as we generally call it.

"A booklet received by them from the United States Department of Agriculture called attention to the fact that the then modern fence wire did not withstand the corroding effects of the weather as well as the old-time puddled iron fence wire, the statement being followed by another to the effect that modern steel making process made it impossible to produce a metal that would stand up like the old-time iron.

"Mr. Verity was much interested—so much in fact that he began to experiment on the making of what he termed a pure iron which could be produced quickly, with all the ductility and ease of working of modern open-hearth steel, in the meantime having bought an old roll-

ing mill at Middletown, Ohio, and installed a galvanizing plant in the mill.

"His efforts were crowned with success and Armco pure ingot iron came into existence.

"His task, however, was far from finished, for nobody outside of his



Adam Schepper, President Bay City Local and Member Trade Extension Board.

own immediate circle knew about it, and in 1915 it was decided to begin an advertising campaign to acquaint—not the jobber, the merchant or the sheet metal contractor, so much as the consumer—with the fact that here was a metal sheet which was a real 'quality product.'

"Fifty thousand dollars was the first yearly appropriation—eight years ago—and thus the building of a proper background for trade paper and direct mail publicity was begun.

"Up to the present time nearly two million dollars has been spent directly; in 1922 300 manufacturers using this metal in their finished products—stoves, washing machines, etc.—spent more than a million dollars for advertising in general media and all of them featured the fact Armco pure ingot iron was used in making their goods.

"This campaign has resulted in the growth from a rolling mill with an original payroll of 125 men to a corporation with 70 million dollars capital and thousands of employees.

"But keep in mind that the campaign was based on a 'quality product.'

"The same immutable law which caused this great growth applies to the sheet metal business in general.

"You can, by proper use of advertising, cause your business to



Charles Nason, Newly Elected President and Chairman Entertainment Committee of Auxiliary.

grow by leaps and bounds. But you must use as your foundation the fact that you do a good job and use good materials.

"I like to use this expression—'Advertising Buys Years of Progress'—and with it I mean, that if your ambition is to reach a certain volume of profitable business in ten years advertising will make it possible for you to reach it in five years, for example.

"How should you advertise?

"Here is a good beginning:

"Hire a boy to scout around in your town or neighborhood. Have him look at the buildings as he goes up and down the streets. On this house a down-spout is in bad condition. On that house the gutters are rusted out. On another the cornice work needs fixing, and so on. He makes notations of all these things, together with the name and address of the owner of the building.

"Then send the latter a card or a letter suggesting that it will pay him to have the proper repairs made

and that you will do a good job. You will be pleasantly surprised to note the number of responses.

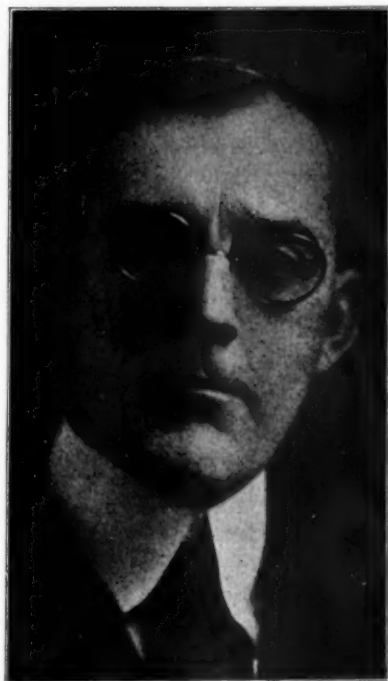
"And keep this in mind: You are rendering a double service:

"First, by calling the owner's attention to the fact that the sheet metal work on his house needs repair. Often he does not even know it.

"Second, by doing a good job for a fair price.

"Another good form of advertising is a poster with information to the effect that 'The Sheet Metal Work on This Building Is Being Done by John Smith,' placed in front of the building where you are doing a job.

"Then there are the imprinted folders furnished by manufacturers. Never let a letter or a bill go out from your office without a 'stuffer,' calling attention to some feature of the work which you are in position to do.



Thomas I. Peacock, Retiring President of Auxiliary.

"Local organizations are often in search of educational films for social gatherings. You can borrow fine films on various features of the sheet metal industry from a number of mills.

"Small 'classified ads' are fine business producers. They should be

used regularly, week in and week out, with larger display ads during spring and fall.

"And last of all—your office force can do much to secure business. Pleasant responses to 'phone calls often result in getting a job for you.

"But remember—it takes time for



W. W. Chalk, Secretary of Auxiliary.

advertising to acquire its momentum in profitable returns. We found that the big results did not commence to show until four years after we began.

"To sum up:

"Use good material.

"Do a good job.

"Let people know that you do.

"Keep it up."

N. J. Kennedy, Business Manager of the Associated Building Employers of Detroit, was the next speaker.

The two main features of Mr. Kennedy's splendid address were:

1. Learn to appreciate the fact "the other fellow" has just the same sort of troubles and problems as you.

2. Learn to appreciate the fact that there is a certain dignity to your profession and that your compensation is in direct proportion to the dignity with which you have taught the public—your customer—to look upon the business in which you are engaged.

The speaker used the simile of the two physicians: One, a neighborhood doctor, charges five dollars for his visit to a patient. The

other, a specialist, charges a fee of \$100.00. They may prescribe the same medicine and otherwise render the same physical service. Why, then, the difference in the fee? Simply the fact that the specialist holds his services and his fee up to the dignity of his profession of a specialist. His superior knowledge, skill and pride in his ability entitle him to the higher fee.

Likewise, when a furnace installer sells a warm air heating plant he is rendering a service, and he should be paid for that service irrespective of what profit he may make on the cast iron, steel, asbestos paper, pipes, registers, etc., that make up the plant, or on the labor performed in making the installation.

The sheet metal contractor must—if he is to prosper as a class or as an individual—imbue the general public with the idea that there is real dignity to the service which he renders.

And he can never do this by showing signs of the small jealousies and back-biting, price-cutting, underhanded methods which too often prevail among the contractors of a city.

Set your house in order, Mr. Kennedy concluded; let people know

will grow by leaps and bounds. There is enough replacement and repair work on present buildings to keep every sheet metal worker busy for many years without having a single new building put up.



H. E. Doherty, Poet and Toastmaster.

Go after the business. It is right before you—waiting for you to take it.

The Auxiliary Banquet.

As usual, the Auxiliary Banquet was a great success. More than two hundred men attended, and with singing and other entertainment spent two hours after the fine dinner in a very enjoyable manner.

"Hughie" Doherty was toastmaster and did himself proudly.

The speaker of the evening was the Reverend Conger Hathaway, pastor of the Presbyterian Church, Plymouth, Michigan. His subject was, "What Is the Idea?"

In very interesting manner Mr. Hathaway drew a picture of man, his opportunities, his failures, his successes, and then he asked, "What Is the Idea?"

His answer was that the idea of man's presence on earth, that the reason for the existence of the world was in the fact that God was the creator of all things and that man's chief end was to glorify Him—and this glorification could only be done by rendering service, by doing our very best in the tasks set for us, by assisting our fellow men to follow in the same path.

Owing to the illness of "Trow" Warner, the sketch which was to be presented by the "Teeandbee" trio, Mr. Warner, Bill Laffin and Dave Farquhar, had to be stricken from the program, and a telegram of sympathy was sent to Mr. Warner in Chicago.

The following list of the Travelers' Auxiliary shows the hosts for the evening, the home city of the member being given, rather than that of his company:

Hosts.

Thomas Brothers & Company, Ltd., Detroit.

William A. Vernier, Superior Safety Furnace Pipe Company, Detroit.

J. D. Swartout, J. D. Swartout Company, Saginaw.

H. H. Thick, Monitor Stove Company, Cincinnati, Ohio.

H. L. Seif, Wise Furnace Company, Akron, Ohio.

R. B. Strong, Homer Furnace Company, Coldwater.

A. J. Ross, Henry Furnace & Foundry Company, Cleveland, Ohio.

J. Charles Ross, Edwards & Chamberlin Company, Kalamazoo.

Elmer C. Ryan, A. M. Castle & Company, Chicago.

Charles J. Pearson, U. S. Register Company, Battle Creek.

Abe Lincoln, Morley Brothers, Saginaw.

J. H. Henninger, The J. M. & L. A. Osborn Company, Cleveland, Ohio.

George Harms, F. Meyer & Brothers Company, Peoria, Illinois.



E. N. Rowley, Entertainment Committee.

that you are in a business that is based upon highly developed skill and workmanship; that you use good material; that you charge a fair price for the service rendered, and you will find that your business



R. O. Mimmack, Entertainment Committee.

David R. Henry, Follansbee Brothers Company, Detroit.

Frank B. Hird, The Adams Company, Dubuque, Iowa.

George W. Heartley, Heartley Machinery Novelty Iron Wire Works, Toledo, Ohio.

C. H. Hallgach, N. & G. Taylor Company, Philadelphia.

D. H. Goodfellow, Follansbee Bros. Company, Detroit.
 B. E. Englander, Vendor Slate Company, Detroit.
 Bert E. Dunn, Rudy Furnace Company, Dowagiac.
 C. C. Campbell, Joseph T. Ryerson & Son, Detroit.
 Louis H. Pearce, National Lead Company, Chicago.
 C. E. Pfaff, Ideal Furnace Company, Detroit.
 E. A. Meyers, Perfection Furnace Pipe Company, Toledo, Ohio.
 C. F. Merritt, The Forest City Foundry & Manufacturing Company, Cleveland, Ohio.
 H. B. Marten, Michigan Employers' Casualty Company, Lansing.
 Howard L. Mason, Carr Supply Company, Chicago.
 T. H. Merriam, Raymond Lead Works, La Grange, Illinois.
 Thomas O. Le May, Follansbee Brothers Company, Detroit.
 C. D. Lyford, Minneapolis Heat Regulator Company, Minneapolis.
 Robert Kruse, Kruse Company, Indianapolis.
 Robert Joy, Wheeling Corrugating Company, Wheeling, West Virginia.
 Miss Etta Cohn, AMERICAN ARTISAN AND HARDWARE RECORD, Chicago.
 Victor Cook, The American Rolling Mill Company, Detroit.
 W. D. Cook, Henry Furnace & Foundry Company, Cleveland, Ohio.
 Charles Bartholomew, Fox Furnace Company, Elyria, Ohio.
 H. A. Beaman, Haynes-Langenberg Manufacturing Company, St. Louis.
 G. E. Barker, Co-Operative Foundry Company, Rochester, New York.
 W. T. Bacon, Follansbee Brothers Company, Detroit.
 Thomas I. Peacock and J. Harvey Manning, Manning Heating Supply Company, Chicago.
 Robert O. Mimmack, Michigan Stove Company, Detroit.
 Charles F. Nason and E. N. Rowley, Milwaukee Corrugating Company, Milwaukee.
 Harry M. Snow, Furnace Fan Company, Dowagiac.
 Joseph L. Stearns, Stearns Register Company, Detroit.
 R. M. Brockway, Beckwith Company, Dowagiac.
 Harry W. Brainerd, The J. M. & L. A. Osborn Company, Cleveland, Ohio.
 Frank W. Beeth, Kruse Company, Indianapolis.
 J. E. Behler, W. C. Hopson Company, Grand Rapids.
 Francis C. Moran, Peninsular Stove Company, Detroit.
 R. H. Reed, Co-Operative Foundry Company, Rochester, New York.
 E. P. Oviatt, Peninsular Stove Company, Detroit.
 H. O. McElwain, Lennox Furnace Company, Marshalltown, Iowa.
 Hugh E. Doherty, Detroit Safety Furnace Company, Detroit.
 N. L. Pierson, Jr., The American Rolling Mill Company, Middletown, Ohio.
 Martin Kerkhof, Fox Furnace Company, Elyria, Ohio.
 R. H. Bristol, Roland & Miller Company, Elkhart, Indiana.
 C. L. Burch, Chicago Furnace Supply Company, Chicago.
 Virgil L. Roland, Roland & Miller, Elkhart, Indiana.
 F. E. Ederle, Grand Rapids.
 A. G. Pedersen, AMERICAN ARTISAN AND HARDWARE RECORD, Chicago.

James A. Eiseman, Monroe Foundry & Furnace Company, Monroe.
 D. Witmer, W. C. Hopson Company, Grand Rapids.
 W. P. Laffin and D. R. Farquhar, Tuttle & Bailey Manufacturing Company, Chicago.
 A. A. Senor, National Paint & Varnish Company, Toledo, Ohio.
 S. L. Memhard, Furnaces & Sheet Metals, Chicago.
 R. W. Menk, Excelsior Steel Furnace Company, Joliet, Illinois.
 E. B. Root, Detroit Safety Furnace Pipe Company, Detroit.
 Edwin A. Scott, Sheet Metal Worker, New York, New York.
 Herbert Cinderey, Sheet Metal Manufacturing Company, Youngstown, Ohio.



N. L. Pierson, Jr.,
Program Cartoonist.

Sam H. Keller, Berger Manufacturing Company, Canton, Ohio.
 Blake S. Wright, Merchant & Evans Company, Chicago.
 R. W. Blanchard, Hart & Cooley Company, Chicago.
 Glenn H. Burgess, Premier Warm Air Heater Company, Dowagiac.
 Leonard C. Verschuur, Scully Steel & Iron Company, Chicago.
 M. L. Evans, Homer Furnace Company, Coldwater.
 W. W. Chalk, The W. J. Burton Company, Detroit.

Resolution on Manufacturers' Sales to Consumers, Architects, Etc.

The following resolution was unanimously adopted at the Thursday forenoon session:

Whereas, it has become a practice, indulged in by some of the manufacturers, their agents, and some jobbing houses, to quote prices on and sell materials entering into the sheet metal and roofing business direct to the consumers, their agents, or their architects; and

Whereas, this practice has deprived the sheet metal and roofing contractors of the legitimate profits they have a right to expect on this material,

Be it therefore resolved, That the offending manufacturers, manufacturers' agents, or jobbers, be acquainted with the harmful results

of this pernicious practice to the sheet metal and roofing trade, and that they be so solicited to adjust their selling policies to insure adequate protection to the trade.

Be it further resolved, That in cases where it becomes impossible to effect a proper cooperation between the manufacturer, his agent, or the jobbing house and the sheet metal and roofing trade, looking toward full and just protection of the interests of the members of this Association, we shall deem it wise and righteous to take any legal methods to secure the desired results.

Further resolved, That a copy of these resolutions be placed in the hands of the manufacturers, their agents, and the jobbing houses, who deal in products that enter into our trade.

Southern Ohio Sheet Metal Contractors Enjoy Meeting at F. H. Lawson Plant.

The F. H. Lawson Company, Cincinnati, distributors of Armco Ingot Iron, took advantage of the recent joint meeting of the Columbus, Dayton and Cincinnati sheet metal contractors to invite them out to their plant for an evening of jollity and good fun. A long table filled with the fat of the land, together with a jazz orchestra, made the occasion all the more inviting.

Mr. Fenton Lawson, President of the F. H. Lawson Company, welcomed the visitors, and Mr. Bennett Chapple, Director of Publicity, and Mr. D. M. Strickland, of the Development Division of The American Rolling Mill Company, talked on the place Armco Ingot Iron occupies in the sheet metal trade today. The motion pictures on the making of Armco Ingot Iron were also shown. The party broke up at a late hour with every indication of one grand, get-together success.

The one who will not take advice from those who have experience pays for it when trouble overtakes him.

Be Sure to Have Your Job Records Complete, Says Greenberg, but Do It with Least Effort.

Intricate Bookkeeping Systems Waste Time and Prevent Many Sheet Metal Men from Knowing Their Costs.

Written Exclusively for AMERICAN ARTISAN AND HARDWARE RECORD by
J. C. Greenberg, Cleveland, Ohio.

JIM SLOW was as busy as a sheet metal man can possibly be when he has a sure enough job. Just think of it, the job was his, and no one could possibly interfere with it. Gee, it was exciting.

Jimmie as I said was busy. He did not see me enter, but when I got near enough to cough real loud, he looked up and said, "Hello there. How are you? Just excuse me for a few minutes and I will get this done sooner, and then I can attend to you."

"Just wait a minute, Jimmie," I said, "what's the excitement all about. What are you doing with all these slips and books and all that junk?"

Jimmie did not answer, but kept on writing for about fifteen minutes. Then he was finished. Turning to me he said, "I never like to talk to anyone when I am making out the records for a job. A mistake is very costly sometimes."

"Oh," I said, "Were you making out a job record?"

"Yes," he replied. "It is a complicated matter, and a fellow must be careful about it."

"How do you do it?" I asked.

"Well," Jimmie answered, "This slip is marked Number 1, and is called the Material Slip. On it I keep track of the material on any job. Then I take this slip," holding another one, "and fill it out to keep a record of the time and material together, so that I may know just how long it actually took in time to do the job. Now, when the job is finished, I make a final slip that tells me how much material was taken and how much was returned. In this manner I know all about the job from the beginning to the end."

"But, Jimmie," I asked, "how about the overhead on the job? Just how do you keep track of the over-

head and the total cost? How do you determine the real selling price? How do you know just how much profit you have on this job you are figuring out?"

"Oh that?" Jimmie said, "I have a Day Book and I have a real itemized record of everything. My brother-in-law got this system together for me, and it is a peach, all right."

"Yes, Jimmie," I replied with a smile, "It is a peach all right, but it is a rotten peach. Let me tell you what I saw in AMERICAN ARTISAN office the other day, and you will hang your brother-in-law the first time you have a chance."

"What are you doing, kidding me or something?" Jimmie asked with a wounded pride sort of feeling.

"No, I am not kidding you. I just want to tell you what I know, so that you will also know about it."

"All right, shoot it," Jimmie replied. He was a good little sport, and was ready to learn anything at least once.

"Well, Jimmie," I began, "You have read about that fellow Doyle who is writing about accounting in AMERICAN ARTISAN; he is a regular fellow, and knows more about office system than all the business colleges put in one basket. He has the simplest method I ever saw, and the surest thing on record; the way he has it doped out is to save you time, money and everything. Here, is what he has: It is a job ticket that tells you everything all in one writing and on one sheet. All you have to do is to order some of these job tickets and use them. These job tickets are fool-proof and bullet-proof, and gives you a complete record from A to Z."

"What are they like?" Jimmie asked becoming interested.

"Well," I answered, "if you will refer back to the December, 1922, numbers you can see the whole thing, but here is what it does. It tells you whom the job is for, where the address is, whom to charge it to and where to collect the money, as well as who ordered the job done. Then it tells you how much material was taken out, how much was used and how much was brought back. After you have this all down, it tells you in a different column how much the whole thing cost you. This takes in cost of material, labor, overhead, truck trips, foreman, if there is one, and sums up the total cost and selling price, and the last thing you see is how much profit you have earned. It is in duplicate and your workman gets one to guide him on the job."

"That's no good," Jimmie exclaimed. "Do you suppose I want my workmen to know all about my business?"

"He does not know. That is the beauty of the thing," I explained. "All the workman knows is what he should know. The yellow sheet on the bottom is different from the top sheet. While they are both made out at the same time, each one gets the information he needs, and the workman does not know a thing about your business affairs."

"Well," Jimmie said, "That is a whole lot of stuff with one stroke of the pencil all right. But my day book tells me all that this man Doyle gives in his job ticket, so where do I gain anything by using his job tickets?"

"Here is the beauty of it," I said. "After you have all the yellow sheets used up on jobs, the white sheets are left, and they become a Day Book all by themselves. It is an automatic Day Book at the same time. You do not have to make out a million slips as you do now, and after all the work you have done, bingo—you have to build up a day book to boot. Believe me, this man Doyle is a real guy and knows his business. Think of it, Jimmie, one writing, and you have a complete record of that particular job, and a day book thrown in without any

extra work. You are like many other sheet metal men who like to spend a lot of time getting the jobs mixed up, like chop suey, and when you have finished, the records you have made don't mean anything. I am merely telling you this piece of news in the hope that you wanted to know how to keep track of your jobs without any trouble and at the same time be accurate. You can take my word for it, Jimmie, these Doyle job tickets will save you more headaches than anything you know of. It is the slickest and most sensible thing I ever saw, and at the same time it is accurate and speedy. Why don't you write AMERICAN ARTISAN and get some dope on it? It won't be long before every sheet metal man will have them in use."

"I wish I was sure that you are right about this Doyle job ticket," Jimmie said slowly.

"Oh, don't take my word for it," I said consolingly. "But you will agree with me that AMERICAN ARTISAN AND HARDWARE RECORD would not put their reputation behind a system that was no good. You are skeptical because you never saw such a convenient system in your life."

"Oh, I am not doubting you at all," Jimmie said in an apologetic manner, "but it sounds so good that I just can't see how you can make a carbon copy, and yet have two different informations about the same thing."

"Don't worry about this. That is what Doyle is for," I said. "All you have to do is to write to AMERICAN ARTISAN and find out for yourself. These job tickets are cheaper than wrapping paper, and will sure make you feel like a real fellow. Hop to it."

Now, dear reader, if you are in Jimmie's fix, just take a hint and get these Doyle job tickets. After a few minutes' study, you will be all set and goodbye mistakes and lost records, and get a ready automatic day book which grows with every job. Are you on, brother?

Happiness is a by-product of industry.

Wade A. Taylor, Banker and Steel Maker, Dead.

Wade A. Taylor, Youngstown, Ohio, prominent Mahoning Valley banker and steel manufacturer, died suddenly February 17 at Pasadena, California. He was about 60.

Accompanied by his wife and daughter, Mr. Taylor left his home in Youngstown January 22 on a two-month tour, during which a trip to Honolulu was anticipated. His wife and daughter were with him when he died.

Mr. Taylor was owner of the American Zinc Products mills at Greencastle, Indiana, and president of the Dollar Bank at Niles. Up to the time the Republic Iron & Steel Co. acquired the Deforest Steel & Tin Plate Co. at Niles, he was head of that concern.

Notes and Queries

Address of Anchor Stove and Range Company.

From Stove Dealers Supply Company, 310 Chestnut Street, Milwaukee, Wisconsin.

Kindly advise us where the Anchor Stove and Range Company is located.

Ans.—New Albany, Indiana.

"O. K." Cornice Brake.

From R. W. Tyler, 34 North First Avenue, Canton, Illinois.

Will you please inform me who makes the "O. K." cornice brake?

Ans.—Dreis and Krump Manufacturing Company, 2911 South Halsted Street, Chicago, Illinois. It is known now as the "Chicago."

Damper.

From Van Denberg Supply Company, 116 North Madison Street, Rockford, Illinois.

Please let us know who makes a butterfly or balanced cast iron damper to fit a 5-inch and a 6-inch vertical smoke pipe.

Ans.—The Adams Company, Dubuque, Iowa.

Harness for Farm Use.

From R. W. Tyler, 34 North First Avenue, Canton, Illinois.

Can you advise me who manufactures harness for farm use?

Ans.—J. G. Starr and Son, Decatur, Illinois; Adams and Johnson Company, Galesburg, Illinois; Kramer Rotary Harrow Company,

Morton, Illinois; B. S. Green Company, Bloomington, Illinois, and Charles Kronauer and Company, 844 Fulton Street, Chicago, Illinois.

Radiator Cores in St. Paul.

From C. A. Ringquist, Ireton, Iowa.

Please advise me who makes automobile radiator cores in St. Paul, Minnesota.

Ans.—Witte Auto Radiator Corporation, 2237 Hampden Avenue, and St. Paul Auto Radiator Manufacturing Company, 161 West 4th Street.

"Chicago" O. K. Cornice Brake.

From Dunham-Scott Company, 17-19 South Third Street, Minneapolis, Minnesota.

Can you tell us who makes the "Chicago" O. K. cornice brakes?

Ans.—Dreis and Krump Manufacturing Company, 2911 South Halsted Street, Chicago, Illinois.

Repairs for "Musselman" Coaster Brake.

From A. F. Schemmer, Rock Valley, Iowa.

Please inform me where I can secure repairs for the "Musselman" bicycle coaster brake.

Ans.—You can get repairs from the manufacturers, The Miami Cycle Manufacturing Company, Middletown, Ohio, or from the Mead Cycle Company, 33 North Canal Street, Chicago, Illinois.

"Eureka" Soldering Flux.

From Koeberle-Heyer Company, Sumner, Iowa.

We should like to know who makes the "Eureka" soldering flux.

Ans.—Grasselli Chemical Company, Guardian Building, Cleveland, Ohio.

Washing Machine.

From Crary Hardware Company, Middleport, Ohio.

Please let us know who makes the electric washing machine that has large flexible rubber rolls in the wringer.

Ans.—This is the "Prima" electric washing machine, and is manufactured by the Buckeye Churn Company, Sidney, Ohio.

"Sunshine" Lamp Burner.

From Widhem Remedy and Manufacturing Company, Fremont, Nebraska.

Kindly inform us who makes the "Sunshine" lamp burner, also where is E. Miller and Company located?

Ans.—This burner is made by E. Miller and Company at Meriden, Connecticut.

Events and Progress of the Hardware Trade.

What the Retailers, Jobbers and Manufacturers Are Doing Latest Selling Methods and Experiences of Successful Men.

Window Display Competition Closes April First.

"I would call your attention to the much abused and ill-treated show window," said President L. B. Wallace to the hardware dealers gathered at the annual convention of the Mountain States Hardware and Implement Association.

"It is true that window trimming is an art, but we don't necessarily need to be artists in order to trim a window that is presentable to the eye and a real sales medium. This is the most valuable space in the store and coupled up with newspaper advertising and selling force will materially increase sales.

"Those who haven't modern show windows should immediately get them and those who have should give them attention not less than once a week and twice would be better. If you are skeptical as to the results that may be obtained try putting in a gun window or a window of cutlery, flashlights and other trinkets that the average man or boy is interested in, and you will find that the first day will pay you interest for a month on the added investment."

Mr. Wallace's sound suggestions to the dealers of this tri-state gathering have general applicability. It is to encourage the use of the window display to the fullest extent that AMERICAN ARTISAN conducts its annual window display contest among its merchant subscribers.

The contest is now on and the first entries have been received. Read the following rules and then photograph the window display and send it in.

The display may be made up of goods from any of the following lines: General hardware, machinists' supplies, builders' hardware, automobile supplies, sporting goods, fishing tackle, house furnishings

and paints, cutlery, dairy supplies, stoves, ranges, warm air heaters, sheet metal or kindred lines.

The photograph, together with description of how the window display was arranged and the materials used, may be sent by mail or express, charges prepaid, and must reach this office *not later than April 1, 1923.*

Each photograph and description must be signed by a fictitious name or device and the same name or device must be placed within a sealed

envelope containing the real name and address of the contestant, this sealed envelope to be enclosed with the photograph.

AMERICAN ARTISAN AND HARDWARE RECORD reserves the right to publish all photographs and descriptions submitted in the contest.

Four prizes, totaling \$100, are to be awarded for the entries adjudged the most meritorious. These are: First prize, \$50; second prize, \$25; third prize, \$15, and fourth prize, \$10.

Missouri Hardware Merchants Meet In St. Louis For Twenty-Fifth Annual Convention.

Fine Addresses And Interesting Discussions Feature Program of "Show Me State" Hardwaremen.

THE Twenty-fifth Annual Convention of the Missouri Retail Hardware Association was held at the Marquette Hotel, St. Louis, February 27, 28 and March 1, with a good attendance.

In his address of welcome President Hoffman suggested to the manufacturers and jobbers that it would be a good idea and a profitable one for them to educate their salesmen on Dealers' Costs, for with this information the salesman would be a real help to the retailer.

He called on Harry Dickbrader as one of the pioneer members of the Missouri Retail Hardware Association first, and Mr. Dickbrader gave a short talk on how he had benefited by attending the Missouri meetings regularly since the first meeting, 25 years ago.

The following visiting jobbers spoke:

George Simmons, of Simmons Hardware Company, his talk being on the important place held by the retailer.

"The retailer," he said, "is an important link in getting the prod-

uct from the manufacturer to the consumer. He is the life of his community and therefore entitled to fair compensation."

H. W. Geller, of Geller, Ward & Hasner Hardware Company, spoke more as a representative of the St. Louis Convention Bureau, extending a hearty invitation to the Association to make St. Louis its permanent Convention city.

Mr. Morgenson, Vice President of the St. Louis House of Simmons Hardware Company, who was transferred to St. Louis from Boston three weeks ago, gave his impressions of St. Louis and said that he has found in the West we ask for results—not past history. It isn't, "What have you and your ancestors done?"; it is, "What can you do?"

Short talks were also given by Mr. Hopkins, of Geller, Ward & Hasner Hardware Company; Rivers Peterson, of *National Hardware Bulletin*; M. L. Wyckoff, of *Hardware Age*, and Miss E. Cohn, of AMERICAN ARTISAN AND HARDWARE RECORD.

R. W. Shapleigh, of the Shap-

leigh Hardware Company, and Mrs. H. M. Keim and Mrs. C. C. Carter, both of Carthage, Missouri, also spoke briefly.

Mr. Johnson, of E. C. Atkins & Company, gave one of his entertaining solos on an Atkins Silver Steel Saw.

Rivers Peterson's talk on "Stock Turns" was more in the manner of leading in discussion. He said that the dealer's greatest fault is in buying too heavily to get extra discounts, and urged dealers to use more care in buying.

"Don't let any man sell you anything. Buy what you want and can turn over. Next time a salesman offers you a special quantity discount, before you place your order stop to think how long it will take you to turn over."

During the afternoon session the officers' reports were rendered.

Secretary F. X. Becherer's report, which gives a fair idea of the activities of the Association during 1922, follows:

Secretary Becherer's Report.

I have been away from my office doing field work 93 days, field work in St. Louis 14 days, a total of 107 days. I have visited 107 towns, called on 230 members and 162 non-members, helped and advised members with their bookkeeping systems, and advised installation of the N. R. H. A. Accounting System.

I have advised and helped members with rearranging stores, display tables, show window displays, marking up stocks, price service and information of various character. Inspected insurance policies, advising change of forms when two or more policies did not read alike.

Our freight auditing department has returned hundreds of dollars in freight overcharges during the year. We still have hundreds of claims filed for our members against the railroads, who sometimes are very slow in paying claims. We urge all our members to write for shipping tags and ship their freight bills for auditing.

We urge our members to use the Secretary's office for information of any character. If you write our

office, we will try and give it to you by return mail. In case we haven't the information on hand that you want, we will forward your letter to the Service Bureau the National office, and they will give you any source of information you may want.

Your Association endorses and recommends a Price Service with Weekly Price Changes. There are now two jobbers in Missouri furnishing this service to dealers. At the present time, with the many advances coming along, a Price Service is of great value in marking up with the market. It enables dealers to



F. X. Becherer,
Secretary.

compete with mail order houses and many dealers who have a service have more than paid for same by just one sale being made, owing to the fact that price could be made when the customer was making inquiry. Ask your neighbor dealers who are using a Price Service what they think of it.

I urge all dealers to watch their stocks very close during the advancing market. Keep up your stocks, but be careful and do not overbuy. The trend of the market today is upward, but the time will come when there is bound to be a change, so do not be caught with your shelves loaded by overbuying to probably save an extra 5%. Turn your goods often, that is what makes your profits and not the extra 5% on buying large quantities.

Avoid duplication of lines, avoid buying and having on your shelves several lines of paints, hand saws, granite ware, aluminum ware, etc.

Make your store inviting, particularly to the women trade, by having clean, neat stores, show windows, floor cases, display tables. Keep your goods well displayed and don't forget the fact that your show windows are the eyes of your store. Keep them neat and change often.

List up your dead stock or slow sellers. Put a bargain price on them and put to work many idle dollars. Use the Monthly Exchange Bulletin. Let us publish your slow sellers. That is one of your Association Services.

Quit guessing about your book-keeping accounts and install an N. R. H. A. Accounting System. This is a simplified system that can be installed at a nominal cost.

Through your Association and other Associations we succeeded in killing the obnoxious "Quail Bill," just recently put before your State Legislature. There is now before the House a bill to prohibit the sale, use or ownership of automatic, magazine or pump shotguns. Write your representative to vote against this bill, as it will ruin the sporting part of your business, because if there are no shotguns sold, it will kill the sale of loaded shells.

During the past year we held many group meetings in different sections of the state and I am thoroughly sold on the idea. I know it is bringing the Association activities closer to the members and attending group meetings are helped by them. I want to urge that more meetings be held in 1923. Let every member have a pride in seeing his Association grow and help by bringing in his neighbor dealer.

I want to ask all dealers attending this Convention to visit each one of our exhibitors and register with them; show them you are interested and glad to see their exhibit. Where price and quality prevail, and you are in the market for their goods, place an order with them, and if you are not buying, visit with them and show a friendly spirit by getting acquainted.

In closing I want to thank you all for the splendid cooperation given myself and President Hoff-

man during the past year. I also want to thank President Hoffman and our entire board for their cooperation, in being ready and willing at all times to assist in the work. Your President has been with me at several group meetings and has at all times been of great help in the Association work. I want to urge you to continue this fine Association spirit by bringing in your competitor and neighbor dealer as members of our Association.

At the Wednesday forenoon session Edwin T. Meredith, Secretary of Agriculture during part of President Wilson's administration, gave a short but wonderfully interesting address, in part as follows:

"One dollar or \$1.50 added to the income from each acre of improved land in the United States marks the difference between national prosperity and sluggishness.

"Agriculture is of fundamental importance to all lines of business.

"Taking \$1 an acre away from what the farmer earned last year will bring disaster and bankruptcy to business generally."

Mr. Meredith gave numerous figures to strengthen his statement of the importance of agriculture. Since 1865 an average of 95 out of 1,000 business firms failed yearly, he said, and in the same period the average return per farm acre was \$14.

When the farm return fell below the average the business failures rose above the average, and vice versa.

The opportunities for persons to go into business have been controlled by the increase of improved acreage in the United States, he declared, stating that while in 1870 there was one business firm for every 425 acres of improved land, there is today one firm for every 275 acres. Is it not important, he asked, what happens on those various 275-acre tracts?

The Department of Agriculture estimated recently that the farmers of the country received \$1,900,000,000 more in 1922 than in the preceding year, which means an additional \$300 for each farmer, he said.

This, he declared, means more to the barber in the St. Louis hotel and to the St. Louis manufacturer than any other element influencing their business, as \$300 in the hands of the farmers means \$3,000 in business for others.

An interest in agriculture is an enlightened selfishness, Meredith declared, and advised that the least that could be done would be to take an interest in the various bills pending before Congress which have to do with the farmer and with farming.

B. Christianson, Assistant Secretary of Wisconsin Retail Hardware Association, spoke on "Guaranteeing Profits." He laid stress on the necessity of dealers knowing ratio of expense on all classes of merchandise.

"Learn to look up to expense, not down," he said, "as expense is an investment you make in order to make a profit. You save by spending, and as long as spending increases your efficiency, you can afford to spend.

"Lower your expenses by increasing your sales volume.

"When you buy merchandise be sure to buy only at such prices as will allow a fair profit of at least 5% net after adding 20% for expenses, which is all your expense should total, including rent, salaries, interest, depreciation, bad accounts, etc.

"If your general expense averages more than 20% it is too high and should be looked into.

"All things come to him who waits—Not, and to be successful you should

"First—Get all you can for your merchandise.

"Second—Learn to know a profit when you see it.

"Third—Get a definite figure on all your expenses."

At the Wednesday afternoon session the election of officers took place, with the following result:

President—G. M. Rinie, St. Louis.

Vice-President—J. F. Parrish, Hamilton.

Secretary—F. X. Becherer, St. Louis.

Treasurer—J. G. Wade, Monroe City.

Executive Committee—Ward Hammel, De Soto (1924); E. J. Fout, Brookfield (1924); R. C. Singley, Green City (1925); G. A. Pauly, St. Louis (1925); C. C. Carter, Carthage (1926), and A. M. Hoffman, Sedalia (1926), the figures indicating the expiration of their respective terms.

St. Louis Sidelights

The banquet Wednesday evening deserves particular mention as it was really a real success—splendid dinner, exceptional musical talent and short peppy talks.

It seemed like a big family party; everybody happy and full of fun; ready to give and take.

To G. A. Pauly, chairman, credit must be given for the success of the banquet. When Colonel Isaac A. Hedges, speaker of the evening, in his introductory remarks paid tribute to Mr. Pauly as Missouri Retail Hardware Association's veteran members, he expressed the sentiments of all who have been fortunate enough to know him.

"No finer man; no better friend; nor more upright and honest business man and citizen than G. A. Pauly exists," he said.

Missouri never forgets its guests and never will its guests forget St. Louis, for there is an air of good-fellowship and "you are welcome" about the Missouri bunch that makes you feel at home and want to come again.

To President Hoffman, Secretary Becherer, and the officers, congratulations and thanks are due.

Our old friend, J. M. Campbell, no need to introduce him, says this is the first time he has ever acted as toastmaster at a banquet. Campbell also says he has just learned to dance. Well, if he can dance as well as he can speak, Rodolph Valentino had better look out for his laurels.

Captain Gorby and R. A. Peterson evidently spend their nights absorbing joke and story books. Funny how well they work together. Just once did they slip up. But the story was so good and the Captain's way of telling it so entertaining, it was as good as a brand new one.

The Shapleigh Hardware Company surely believe in the good old adage, "It is more blessed to give than receive." The prizes they seemed almost constantly giving to dealers, and dealers' wives were worthwhile articles of "Diamond-Edge" quality and it was good to see the friendly smile that went with each gift.

R. H. Ogle, general manager; Stanley Quisenberry, Illinois and Missouri sales manager; L. F. Castleman, J. R. Rankin, Ed. Trorlicht, E. T. James and C. T. McDaniel did the honors for Shapleigh Hardware Company and did them well.

And Leon Leu was there boosting the new Vapo oil stove line which apparently is going over big.

R. E. Cannon and R. A. Gould, of the Malleable Iron Range Company, looked pretty busy every time I walked by.

The Fox Furnace Company, with E. H. Skinner and E. B. McKee, occupied a large room with the American Steel and Wire Company. Yes, the American Steel and Wire Company, as usual must have "robbed" a furniture store for they surely can pick out comfortable chairs.

Charlie Gohmann came over unexpectedly to help out C. F. Ravenscroft and C. M. Harman. They brought part of the "kennel" along and the "Pointers" sure did show up fine.

Loyd Scruggs must be an awful busy man. The little time he spent at the Exhibit but maybe he was working hard making those gold pieces the Copper Clad cranks, headed by Salesmanager J. D. Allison, handed out so generously.

That "Red Wheel" on the Quick Meal Oil Stoves attracted much attention, but didn't need much introduction as the American Stove

Company are advertising it so generously.

Yes, the old stand-bys, E. C. Atkins & Company, Elgin Stove and Oven Company, Aluminum Goods Manufacturing Company, Majestic Manufacturing Company, Wheeling Corrugating Company, were all there. No convention would be complete without them.

Just because the goods you are closing out are odds and ends and not very desirable, don't display them in a jumble. Make them look as well as you can.

Coming Conventions

Iowa Sheet Metal Contractors' Association, Sioux City, Iowa, March 14, 15, 1923. R. E. Pauley, Secretary, Mason City, Iowa.

Wisconsin Sheet Metal Contractors' Association, Republican House, Milwaukee, Wisconsin, March 14 and 15. Edward Hoffman, Secretary, 279 Lake Street, Milwaukee, Wisconsin.

Illinois Sheet Metal Contractors' Association, Decatur, Illinois, April 4 and 5, 1923. Fred Gross, Secretary, Quincy, Illinois.

National Warm Air Heating and Ventilating Association, Cleveland, Ohio, April 18 and 19, 1923. Allen W. Williams, Secretary, 52 West Gay Street, Columbus, Ohio.

American Hardware Manufacturers' Association, Spring Convention, Windsor Hotel, Jacksonville, Florida, April 24, 25, 26 and 27, 1923. Frederick D. Mitchell, Secretary - Treasurer, 1819 Broadway, New York City.

Southern Hardware Jobbers' Association, Windsor Hotel, Jacksonville, Florida, April 24, 25, 26 and 27, 1923. John Donnan, Secretary-Treasurer, Richmond, Virginia.

Old Guard Southern Hardware Salesmen's Association, Windsor Hotel, Jacksonville, Florida, April 25, 1923. R. P. Boyd, Secretary-Treasurer, R. F. D. 4, Knoxville, Tennessee.

Hardware Association of the Carolinas, Columbia, South Carolina, May 8, 9, 10 and 11, 1923. T. W. Dixon, Secretary-Treasurer, Charlotte, North Carolina.

Arkansas Retail Hardware Association, Marion Hotel, Little Rock, Arkansas, May, 1923. L. P. Biggs, Secretary, 815-816 Southern Trust Building, Little Rock, Arkansas.

Southeastern Retail Hardware and Implement Association, covering Tennessee, Alabama, Georgia and Florida. Auditorium Armory, Atlanta, Georgia. May 15, 16, 17 and 18, 1923. Walter Harlan, Secretary-Treasurer, 701 Grand Theater Building, Atlanta, Georgia.

National Retail Hardware Association, Richmond, Virginia, June, 1923. Herbert P. Sheets, Secretary-Treasurer, Argos, Indiana.

The National Association of Sheet Metal Contractors, St. Louis, Missouri, June 25 to 29, 1923. E. B. Langenberg, Secretary, 4057 Forest Park Boulevard, St. Louis, Missouri; E. L. Seabrook, 608

Chestnut Street, Philadelphia,, Secretary.

Missouri Sheet Metal Contractors' Association, Statler Hotel, St. Louis, Missouri, June 25, 1923. Otto E. Scheske, Secretary, 3818 Maffitt Avenue, St. Louis, Missouri.

Retail Hardware Doings

Georgia.

L. L. Blackmon has purchased the Wells Hardware Company at Cordele.

Illinois.

At Hillsboro, H. C. Latham has sold his interest in his hardware business to his son Clay.

George McLaughlin and his son Carl have purchased the James and Lindsey Hardware store at Flora.

Indiana.

The Peter Klein Hardware Company of Evansville has been incorporated with a capital of \$15,000. Incorporators are Mayme K. Peter, Mary Klein, and Little E. Klein.

Iowa.

Herbert Carroll has purchased the interest of Mr. Wells in the hardware store of Carroll and Wells at Pulaski. The firm name is now Carroll and Carroll.

A. C. Frederickson has sold his hardware stock at Marne to Chris Anderson of Bohrbeck. The merchandise has been moved to Mr. Anderson's store at Bohrbeck.

Mr. Rowe has gone into the hardware business at Grinnell.

Michigan.

The hardware firm of J. N. and E. N. Saterthwaite, in business at Tecumseh for fifty years, has retired from business.

William Blanchard has opened a hardware store at 1120 North Saginaw Street, Flint.

Minnesota.

The hardware firm of Lies and Stang have dissolved partnership. Mr. Stang will continue the business.

Missouri.

C. F. Pelsure, for many years a hardware dealer in the Pelsure and Herring hardware firm at Paris, sold his interest to his partner, H. R. Herring.

Montana.

The hardware firm of Danielson and Rahpun at Billings has dissolved partnership, and the business will be continued by John Danielson.

South Dakota.

J. N. Vikre is the new proprietor of the Central Hardware Store at Vienna.

Mr. Kittelson has purchased the Haibek Brothers hardware stock at Clear Lake.

Texas.

John M. McLaurin and J. H. Arthur have purchased the stock of The San Angelo Hardware Company, 124 South Chadbourne Street, San Angelo, from Fred Williams.

Wisconsin.

The Moore Hardware Company at Lake Geneva is enlarging its store building.

Liver and Torgerson of Independence have sold their hardware store to Wren and Albert Torgerson.

Review of Conditions in the Metal Markets.

General Situation in the Steel Industry. Report of Prices and Tendencies in Sheet Metals, Pig Iron, etc.

Non-Ferrous Metals Are All Being Advanced in Price.

The past week has seen one of the strongest and most active metal markets in years. Copper has advanced steadily to above 16.75c, delivered, an increase of 1 $\frac{3}{4}$ c. Copper and brass rolled products, wire, scrap, lake copper, casting copper, composition ingot and other products allied with copper have accordingly been marked up in line, with the higher electrolytic prices. Quotations for copper, lead, zinc and tin have reached levels higher than at any time since October, 1920, when the markets were on their way down from the peaks of the 1920 inflation.

Copper producers have sold heavily for delivery through June and stocks of refined copper are closely held by two or three producers. Practically no stocks exist in second hands, while consumers' stocks are extremely low, judging from the pressing demand for quick shipments. Similarly, fabricators have experienced heavy demand for their products. Mills are booked up solid in practically all lines for 90 days: some mills are booked up until August and will accept business only for price on the fifteenth of the month preceding date of shipment. Wire business has been exceptional.

Casting copper prices advanced $\frac{3}{4}$ cents in the past to 16.50c, refinery. Refiners have been short of raw material and inclined to care only for regular customers. Railroad demand has been especially heavy.

The Chicago warehouse sheet copper base is now 24 $\frac{1}{4}$ c, an advance of one cent since a week ago.

Tin.

Tin quotations climbed up to a new high at 44.75c, for Straits tin for future shipment reacting to 44.37 $\frac{1}{2}$ c on Feb. 26. Spot has been obtainable about $\frac{1}{8}$ cent under fu-

ture shipments. The Singapore market again has assumed leadership of the advance, becoming the highest market in the world. Ninety-nine per cent tin has been quoted 1 $\frac{1}{4}$ cents under Straits. Sharp reduction in world visible supplies has been predicted as of March 1.

Chicago warehouses quote: Pig tin at 51c and box tin at 53c, a three cent advance.

Lead

The American Smelting and Refining Company advanced its lead price \$2 a ton February 23, to 8.10 cents, East Saint Louis, in accordance with the London market, which is a gauge of what Europe would pay for Mexican lead. America has had to take a fair proportion of Mexican to supplement American production. Heavy consumption continues and demand is good. Outside sellers have been able to obtain 8.30 cents, New York, 8.25 cents, East Saint Louis, for March shipment.

Pig lead is quoted by Chicago jobbers at 9.75 cents with bar lead at 10.75 cents, an advance of $\frac{1}{4}$ cent.

Zinc.

Zinc quotations have reached 7.65 cents, East Saint Louis, February 26, an advance of $\frac{1}{4}$ cent in a week and are now at 7.70 cents. Futures, as far ahead as August, sold at 7.45 cents. Good export business has been done, both to England and France. The United States Steel Corporation has been an important buyer, to supplement its own production at Donora, Pennsylvania, and Cherryvale, Kansas. High grade zinc was advanced by a leading smelter from 8.25 cents to 8.50 cents, delivered. Sheet zinc is up to \$9.65 per 100 pounds.

Chicago warehouses quote zinc slabs at \$8.40, an advance of 15 cents per 100 pounds.

Solder.

Chicago warehouses quote solder prices as follows: Warranted, 50-50, per 100 pounds, \$30.50; commercial, 45-55, per 100 pounds, \$29.50; and plumbers', per 100 pounds, \$27.00, an average advance of 2 cents per pound.

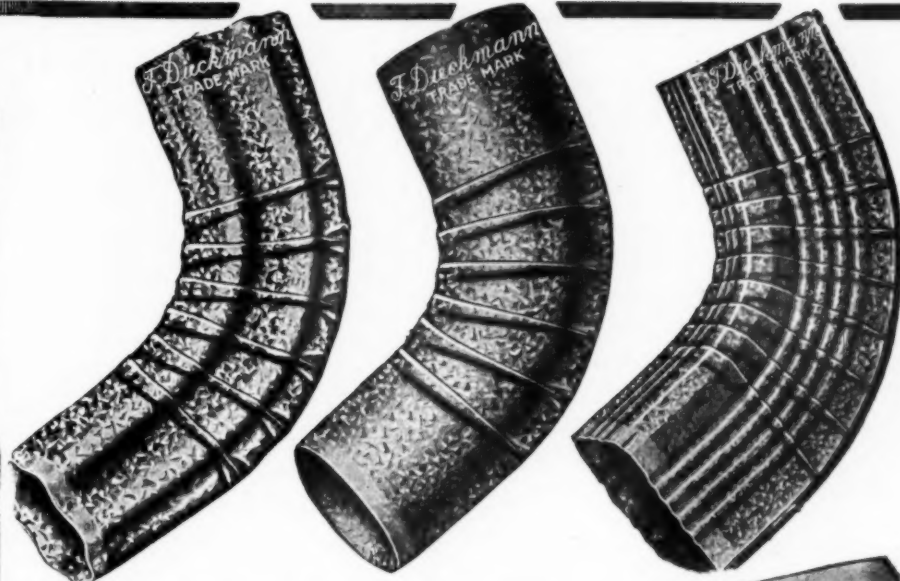
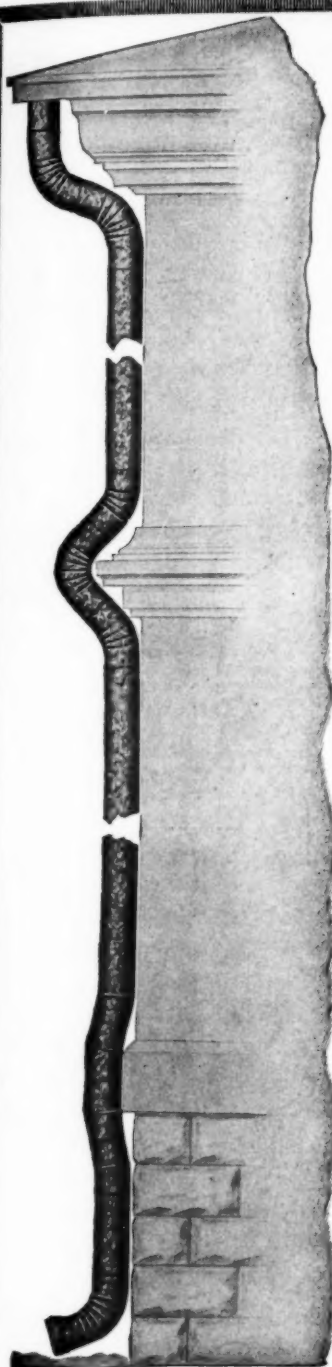
Bolts and Nuts.

Bolt and nut orders total a fair amount of business for current delivery and as contracts for first quarter were heavy makers are operating as full as raw material and labor conditions will permit. No contracting for second quarter has been done yet. Prices are firm and unchanged.

Wire and Nails.

Sellers of wire and nails believe present demand for nails is greater than at any time. Inquiries and specifications in all lines are unusually heavy and much pressure for delivery is being exerted by consumers. With about 80 per cent operation, mills are turning out a heavy tonnage but are unable to keep pace with sales, although only such business is being booked as seems strictly legitimate. No buyer is allowed to take more than his needs indicate and no speculation is possible. Prices by western producers are unchanged, although some eastern makers have advanced their figure somewhat.

The three largest poultry netting manufacturers and two of the largest wire cloth producers are out of the market, having all the goods sold that they can possibly produce for the time being. This is accounted for by the fact that they are not able to obtain enough of the small wire which enters into their product to maintain full production. It is reported that the large interests are producing only about 65 per cent of their capacity of small wire. Naturally, they have orders booked

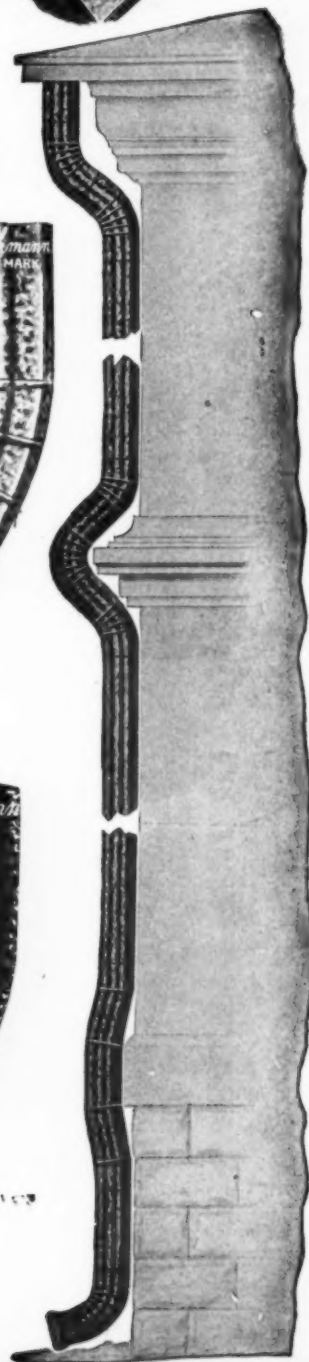
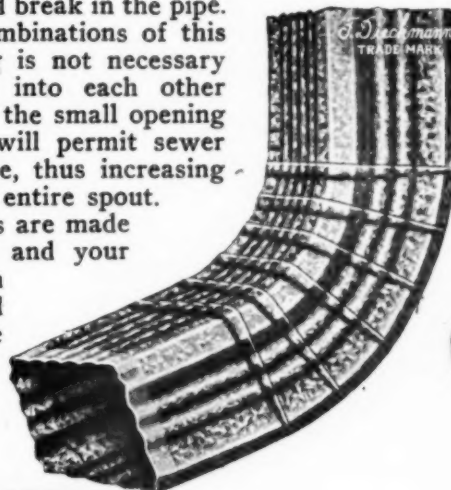


Illustrations show elbows of all angles from 10 to 90°. Note how close each cluster of elbows hugs the walls.

Use short angle elbows to get around sills, cornice mouldings and all other projections, thus preventing the commonly known soldered break in the pipe.

By using combinations of this kind, soldering is not necessary as elbows fit into each other very snug and the small opening at the joints will permit sewer gases to escape, thus increasing the life of the entire spout.

These elbows are made in all designs and your dimensions can be arranged right on the job.



TRADE MARK
F. Dieckmann

This Emblem of Quality is stamped in each.



THE FERDINAND DIECKMANN COMPANY
P. O. Station B Cincinnati, Ohio

for the larger sizes of wire, which runs into more tonnage, and therefore would pay more attention to these orders than they would to orders for the small wire.

Tin Plate.

The rising costs of pig tin and tin bars are reflected in higher levels on tin plate. The American Sheet and Tin Plate Company on Monday advanced tin plate 20 cents per base box, to \$4.95 per base box of 100 pounds, Pittsburgh. Independent producers such as the Jones and Laughlin Steel Corporation, the Weirton Steel Company and others late last week advanced 25 cents per base box, to \$5 per base box of 100 pounds. These levels mean little, particularly in the case of the American Sheet & Tin Plate Company since no tonnage is available for delivery in second quarter. One immediate result, however, will be the ability of those who have it to obtain higher levels on stock items of tin plate. If pig tin, which has advanced $8\frac{3}{4}$ cents since last November when the leading interest announced its \$4.75 price, continues to go up, and tin bars which have advanced \$7.50 per ton to \$42.50 in the same period, continue in the same direction it probably will be necessary to inaugurate further advances by the time the books are opened for the third quarter. In the meantime demand remains heavy for production plate as indicated by specifications on old contracts at the \$4.75 level.

Sheets.

Effective immediately American Sheet and Tin Plate Company has advanced its prices as follows: Blue annealed and black \$3.00 per ton, galvanized \$5.00, automobile sheets \$6.00, making its prices as follows: Blue annealed, 2.65 cents; black, 3.50 cents; galvanized, 4.75 cents; automobile sheets, 5.00 cents.

The company is practically sold up to July 1st, against its probable production and wishes to avoid having official prices far below the actual market.

Prices of independent sheet producers likewise are advancing. The

Wheeling Steel Products Company last Wednesday commenced to quote 3.60c and 4.75c, respectively, on black and galvanized sheets, an advance of \$5 per ton on black and an increase of \$3 in the spread between black and galvanized. It also inaugurated two bases on blue annealed, 2.75c for 12-gauge and heavier, and 2.90c for 13-gauge and lighter. These prices are for April and nearby delivery only. Other quotations by independent producers run as high as 3.75c on black and as high as 5.35c on full-finished automobile sheets. Leading independent producers such as the Newton Steel Company, Follansbee Brothers Company, Allegheny Steel Com-

pany, West Penn Steel Company, and others have announced 5.35c as their price for the second quarter on full-finished automobile sheets.

Demand is as diversified as ever and is coming in from every section, jobbers everywhere being anxious to meet the spring and summer demand with well-stocked warehouses. Producers would have no difficulty in increasing their commitments by many thousands of tons if they had material available. Operating rates still remain high, independents slightly in advance of 90 per cent on the average, while the leading interest has reached 89 per cent with the starting of seven mills at its American works.

Buying Movement In Pig Iron Market Is Keeping Up With Prices Higher.

Chicago Furnaces Have Sold Fully 75 Percent of Stock For Second Quarter.

ALIVELY buying movement in pig iron for second quarter is keeping up. The week's sales include 50,000 tons additional at Philadelphia including 25,000 tons to pipe foundries, 50,000 tons at New York, 35,000 tons at Cleveland, 30,000 to 35,000 tons at Buffalo, a good total at Chicago and miscellaneous bookings elsewhere, on a comparable scale. Prices are being established more firmly, 50 cents to \$1 higher than a week ago.

Demand for pig iron is sustained and prices are strong. Leading northern merchants have sold fully 75 per cent of the second quarter capacity of their active furnaces, and additional business is coming in steadily. Sizable sales are largely for second quarter shipment, although there is active demand for small tonnages for prompt delivery. The largest order for early shipment reported in the week covered 1000 tons of malleable for a Michigan melter. Other sales include 3000 to 4000 tons of malleable for a Wisconsin user, divided between a number of sellers; also 1000 tons of malleable and 500 tons of charcoal iron

for a western Michigan plant; 800 tons of No. 3 foundry iron and several hundred tons of No. 2 for a local melter. No third quarter buying has been reported. Outside of a few recent orders in which sellers honored old quotations, transactions have been uniformly on a basis of \$30, furnace.

In the Pittsburgh district further advances are noted in pig iron and prices are growing stronger each week. Bessemer has sold in fair sized lots at \$28.50, valley and \$28.50, f. o. b. Johnstown, Pennsylvania, and now \$29 is quoted. While the last sales of basic were on a \$27, valley basic, several nearby sheet makers closing up at that level, \$27.50 since has been quoted on other inquiries and that now is the minimum of the market. Some makers quote as high as \$28, valley, and the Cambria Steel Company is naming that as its minimum, f. o. b. Johnstown, the freight rate to Pittsburgh from the two points being identical, \$1.77. In connection with steelmaking iron considerable inquiry is current from middle interests.